



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q55806

Yoichi OKAMOTO, et al.

Appln. No.: 09/398,006

Group Art Unit: 1733

Confirmation No.: 9551

Examiner: Justin R. FISCHER

Filed: September 16, 1999

For: PNEUMATIC RADIAL TIRES

**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits this Reply Brief in response to the Examiner's Answer dated June 9, 2005. Entry of this Reply Brief is respectfully requested.

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**STATUS OF CLAIMS**

Claims 1, 3, 5-7 and 24-26 are pending, are rejected, and are the subject matter of this appeal. Claims 1, 3, 5-7 and 24-26 were set forth in their entirety in the Appendix submitted with Appellant's Brief on Appeal filed March 24, 2005.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1, 3, 5, and 24-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Farnsworth (GB 1,483,053) in view of Kohno (U.S. Patent No. 5,968,295) and optionally in view of Gaudin (U.S. Patent No. 5,591,284).
2. Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Farnsworth, Kohno and Gaudin as applied above and further in view of Okamoto (U.S. Patent No. 5,779,828).
3. Claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over Farnsworth, Kohno and Gaudin as applied above and further in view of Imamura (U.S. Patent No. 3,913,652).

### ARGUMENT

For the reasons set forth in Appellant's Appeal Brief, the rejection of the claims on appeal should be reversed. In addition, Appellant submits the following remarks addressing certain points raised by the Examiner in his Answer.

Initially, as noted in Appellant's Appeal Brief, Appellant submits that Farnsworth fails to teach or suggest all the limitations of the claims on appeal and submits that the Examiner has improperly relied upon impermissible hindsight reasoning in rejecting the claims on appeal. *See* Appeal Brief at pages 11-12. Further, the Examiner's grounds of rejection do not meet the Federal Circuit's *rigorous* standard for demonstrating that the claimed subject matter would have been obvious in view of the teachings of the applied art.

For instance, the Examiner continues to mischaracterize the actual teaching of Gaudin, which the Examiner relies upon as evidence that reconfiguring the plies of Farnsworth to achieve Appellant's claimed structure would have been obvious. The Examiner's Answer states:

It is agreed that Gaudin describes a specific belt structure in which a high angled cord layer is disposed between an inner and outer low angle cord layer. However, in describing the axial widths of the respective belt layers, the teachings of Gaudin do not suggest that the plurality of belt assemblies depicted in Figures 6-11 are only specific to the disclosed construction. Applicant is pointed to Column 1, Lines 35-40 in which Gaudin states, "Furthermore, in **belt design**, it is desirable to stagger the ply endings in the edge regions of the belt by employing plies of different widths. This gives a progressive reduction in stiffness and minimized stress concentration at the belt edge." This description suggests that a staggered belt assembly is beneficial for **belt designs** in general- it is by no means specific only to the belt design of Guadin. This arrangement is well recognized in the tire industry.

Examiner's Answer at page 11. (emphasis in original).

As evidenced by the above allegation, the Examiner again relies on a general statement from the background section of Gaudin as justification for expanding the alleged teaching of Gaudin beyond what is actually disclosed in the reference or what would have been obvious to one of ordinary skill in that art. The passage of Gaudin at column 1, lines 35-40, regarding the desirability to stagger the ply endings in the edge regions of the belt by employing plies of "different widths", is so broad as to be meaningless without the context provided by what is actually disclosed in the reference. This statement, even when taken in the context of the entire disclosure, is not a justification to determine obviousness with impermissible hindsight supplementing the deficiencies of the cited references. *See, e.g., In re Zurko*, 59 U.S.P.Q.2d 1694, 1697 (Fed. Cir. 2001) (holding "deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'").

As noted in Appellant's Appeal Brief, the above statement of Gaudin relied upon by the Examiner makes no reference to the relative width of the plies, nor does it make any reference to the angles of the cords within each ply. *See* Appeal Brief at page 17. As previously explained, while Gaudin discloses a three ply arrangement in Fig. 6 in which the outermost strip is wider than the middle strip and narrower than the innermost strip, this three ply arrangement is described with plies having cord angle inclinations and orientations in which the angles of the innermost, middle and outer most plies have cord angle values of 18°, 67° and 18°, respectively, and where the angle of the cords of the outermost ply is oppositely inclined to the angles of the

innermost and middle plies. *See* Appeal Brief at page 13. Further, the scope of Gaudin's teaching is *expressly limited* by the reference itself:

While the present invention has been illustrated by the tire shown in FIG. 1 and as described above, other arrangements of the breaker strip assembly 5 are possible within the scope of the invention, **provided that the first and third plies 1 and 3 have opposite inclination angles in the range of 5° to 40° and the second ply 2 has an inclination the range of 40°-85°.**

Gaudin at col. 3, lines 24-30 (emphasis added); *see* Appeal Brief at pages 13-14.

The Examiner cannot properly rely on Gaudin to teach the width of each of the plies and completely ignore the interrelated characteristic of the values of the cord angles which are "within the scope of the invention" of Gaudin and clearly differ from the claim limitations. Thus, the Examiner's attempt to generalize the teaching of Gaudin is neither supported by the actual disclosure of the reference, nor does it properly account for Gaudin's teaching away from the claimed cord configuration. *See* Appeal Brief at page 14.

Further, the Examiner mischaracterizes Appellant's arguments by stating: "Applicant further argues that while Gaudin may teach a general desirability to stagger the plies, it does not teach one skilled in the art the particular way of doing so." Examiner's Answer at page 12. In fact, Appellant stated that the "quoted section" of Gaudin, in reference to column 1, lines 35-40, does not teach one skilled in the art the particular way of staggering the plies. *See* Appeal Brief at page 17. Indeed, as discussed above, the actual disclosure of Gaudin, which *expressly* limits the scope of Gaudin's teaching, clearly teaches away from the claimed combination. Moreover, the Examiner has not provided a sufficient motivation to modify the disclosure of Farnsworth,

but merely alleges, in a *conclusory* manner, that the claimed combination would have been obvious. *See* Appeal Brief at page 11.

The Examiner alleges, “given the belt construction of Farnsworth (as concerns the direction and cord angle), there are only six possible belt constructions, each of which is expressly depicted by Gaudin- in fact, Farnsworth actually depicts three of the six possible configurations.” Examiner’s Answer at page 12-13. This statement trivializes the clear distinctions between Farnsworth and Gaudin. While Gaudin may depict six different axial width configurations of the three plies, Gaudin, as noted above, clearly teaches that the orientation and direction of the cord angles of the three plies are different from Farnsworth. *See* Appeal Brief at page 11. Further, Farnsworth fails to disclose the combination of three rubberized cord layers having the particular cord orientations and widths recited in the claims.

In addition, the Examiner contends, “[i]t is emphasized that Farnsworth does disclose the combination of three rubberized cord layers having the particular cord orientations recited in the claims, leaving the claimed axial width relationship as the only difference between Farnsworth and the claimed invention.” Examiner’s Answer at page 13. Appellant points out that this statement does not adequately address the issue of the motivation to combine the references at all, let alone in any particular way. Rather, it clearly suggests that the Examiner is selectively lifting individual features from Gaudin without properly considering and confronting the portions of Gaudin which would lead the skilled artisan away from the claimed invention. *See* Appeal Brief at page 14.

With respect to the Examiner's argument regarding the advantages of the claimed subject matter described in the Specification beginning on page 54, Appellant initially notes that the Appeal Brief clearly acknowledged that the data for Examples 15 and 16 depicted in Table 2 correspond to a different embodiment for the claims on appeal. Appeal Brief at page 20. Further, the comparative test data was referred to by Appellant as evidence of "substantial improvements in performance of the tire in accordance with this subject matter covered by the claims on appeal" and to clarify that the comparative examples were not prior art admissions. Appeal Brief at pages 20 and 21. Moreover, the embodiments of examples 15 and 16 in Table 2 are not taught by the disclosure of Farnsworth, nor has the Examiner provided a proper motivation to combine the teaching of Gaudin which, as discussed above, clearly teaches away from the claimed invention.

With respect to the teaching of Kohno, the Examiner contends, "a fair reading of Kohno suggests that it is desired to form an outermost belt ply formed of steel cords with a coating rubber having a high modulus- the reference does not teach that such a high modulus coating rubber is specific to a circumferential belt layer." Examiner's Answer at page 14. In response, Appellant notes that Kohno clearly distinguishes the slant belt layer (6) from the circumferential belt layer (7), and teaches that "at least one circumferential belt layer 7 containing a plurality of cords arranged substantially in parallel to the equatorial plane 5 is disposed on the slant belt layer 6." Kohno at col. 3, lines 48-55 (emphasis added). Further, the disclosure of Kohno mentions nothing about any value of a modulus of elasticity for a slant layer. Rather, Kohno merely teaches the modulus of elasticity for a circumferential belt layer, which is clearly distinct from



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the claimed outermost cord layer. *See* Kohno at col. 4, lines 47-55. Indeed, the “fair reading” of the Examiner is yet another instance where the Examiner is inappropriately supplementing the actual disclosure of a reference to support a legally insufficient determination of obviousness.

**CONCLUSION**

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant respectfully requests that the Board of Appeals and Interferences reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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**23373**

CUSTOMER NUMBER

Date: August 9, 2005